

REMARKS

This application pertains to novel cosmetic and dermatological preparations of the water-in-oil type having a water and water-soluble substance content of at least 75% by weight, a lipid content of at most 25% by weight and wherein the total polarity of the lipid phase is between 20 and 30 Nm/m.

Claims 1-12 are pending; claims 7-12 being added by this amendment. New claims 7-12 do not add any new matter, as they merely recite subject-matter deleted from claims 1-6.


See and

Applicants respectfully request clarification of the Examiner's comments regarding priority. In the Office Action, the Examiner mentions that, if Applicants desire to obtain the benefit of foreign priority, a translation of the foreign application should be submitted in reply to this action. Applicants would respectfully point out that the present application is a translation of the foreign application.

Applicants believe that they have done all that is necessary to obtain the benefit of their foreign priority. If more is required, it is respectfully requested that the Examiner indicate with more particularity what more is required and why.

Claim 6 stands objected to, because "vinylpyrrolidone" was misspelled. This has now been corrected, and the objection should be withdrawn.

Claims 1-6 stand rejected under 35 U.S.C. 112, second paragraph, for various reasons more specifically indicated in the office action. This rejection is primarily directed to the presence of "limitations within limitations", i.e., the phrases "in particular", "preferably", etc. The claims have now been amended to delete all of these expressions, except "optionally". The expression "optionally" does not render the claims indefinite. See MPEP 2173.05(h)III.



The rejection of claims 1-6 under 35 U.S.C. 112, second paragraph, should accordingly now be withdrawn.

For the record, Applicants emphasize that although the claims were amended to overcome this rejection, and, therefore, might be considered to have been amended for a reason substantially related to patentability, a fair reading of the amended claims will reveal that the departures from the previous claims were for clarification purposes only, and that Applicants did not narrow the claims in any material respect. Therefore, Applicants submit that the amended claims are entitled to the full range of equivalents.

Claims 1-6 stand rejected under 35 U.S.C. 103(a) as obvious over Mullel (US 6,083,491) in view of Sine (US 5,997,890). The Examiner sees Mullel as teaching a water-in-oil emulsion comprising cetyl dimethicone copolyol, water and caprylic and capric acid triglycerides and cationic polymers, and certain oil phase constituents; but as failing to teach the per cent weights of the oil and water phases.

The Examiner then relies on Sine which, according to the Examiner, teaches water-in-oil compositions in which the hydrophilic phase comprises 1-98% of the composition. The Examiner thinks it would be obvious to combine Sine's percentages with Mullet's emulsions, and that somehow this would result in Applicants' emulsions.

First of all, Mullet does not teach anything at all about how to prepare water-in-oil emulsions which have the high water contents that Applicants achieve, that comprise the polar lipids that Applicants' emulsions have, or the low viscosities that Applicants achieve (page 6, last two lines).

Mullet is primarily concerned with introducing solid particles, which have been coated with a cationic polymer, into cosmetic preparations. Mullet only mentions water-in-oil emulsions as one of the forms his compositions can take (col. 13, lines 28-30) and specifically discloses only one water-in-oil emulsion, and that emulsion has only 68% water (col. 21, Example K). Moreover, the emulsion of Example K does not contain any alkylmethicone copolyol or alkyl dimethicone copolyols.

Mullet's compositions may be lipsticks, nail varnishes, anhydrous powders, water-in-oil emulsions or oil-in-water emulsions.


Mullet has absolutely no specific teaching about any kind of emulsions; and certainly nothing that would lead to an emulsion having the same or similar components as Applicants, irrespective of amounts!

Thus, the Examiner is not correct when he at least implies that Muellel meets all of Applicants' limitations except for the percentage weights.

Even if one were to decide that it would be desirable to prepare a water-in-oil emulsion having at least 75% water; nothing in Muellel would enable any person skilled in the art to realize that desire. So combining Sine's percentages with Muellel's disclosure could not possibly in any way lead to Applicants novel emulsions.

The Sine reference is even less relevant. Sine is concerned with the addition of titanium dioxide to formulations for covering skin imperfections. Sine's formulations comprise "carriers" for his particles. The carriers can act as diluents, dispersants, solvents or the like (col. 9, lines 19-20).

Sine's formulations can be in the form of lotions, creams, gels, sticks, sprays, ointments, pastes, mousses, and cosmetics; and these forms may comprise several types of carriers such as solutions, aerosols, emulsions, gels, solids and liposomes (col. 9, lines 51-53). Sine mentions both oil-in-water and water-in-oil emulsions as preferred carriers (col. 10, lines 15-24). Sine then goes on to say that oil-in-water emulsions **typically** comprise...about 1% to about 98% of the continuous hydrophilic phase; and that water-in-oil emulsions **typically** comprise from about 1% to 98% if the dispersed hydrophilic phase.



Thus, Sine does not actually **teach** anything at all about water-in-oil emulsions, especially water-in-oil emulsions having high water contents. Sine merely **assumes** that

such exist and are **typical**!

Where in Sine should one look to find out **how** to prepare a water-in-oil emulsion having at least 75% aqueous phase? The clear answer is “nowhere”, because such a lesson is simply not to be found anywhere in this reference.

Note that the **only** emulsions actually disclosed by Sine are oil-in-water emulsions (col. 34, line 47; col. 37, line 17 and col. 38, line 22).

Furthermore, note that Sine's compositions have “apparent viscosities” of 5,000 to 200,000 centipoises. Sine mentions the viscosities of his lotions, creams etc. (col. 10, line 46 et. seq.), but Sine does not say anything at all about the viscosity of his emulsions.

Applicants novel emulsions have viscosities of less than 5000 mPa•s at 25°C; and nothing in Sine would provide any clue whatsoever that water-in-oil emulsions with at least 75% water could possibly have such low viscosities.

It can therefore be seen that no combination of Mellul and Sine could ever lead anyone to Applicants' novel water-in-oil emulsions, and the rejection of claims 1-6 under 35 U.S.C. 103(a) as obvious over Mullel (US 6,083,491) in view of Sine (US 5,997,890) should now be withdrawn.

In view of the present amendments and remarks it is believed that claims 1-12 are

now in condition for allowance. Reconsideration of said claims by the Examiner is respectfully requested and the allowance thereof is courteously solicited.

CONDITIONAL PETITION FOR EXTENSION OF TIME

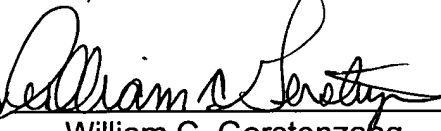
If any extension of time for this amendment is required, applicants request that this be considered a petition therefore. Please charge the required petition fee to Deposit Account No. 14-1263.

ADDITIONAL FEE

Please charge any insufficiency of fee or credit any excess to Deposit Account No. 14-1263.

Respectfully submitted

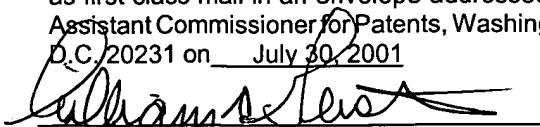
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Date July 30, 2001

**MARKED-UP COPIES OF AMENDED CLAIMS
SHOWING CHANGES RELATIVE TO PREVIOUS VERSIONS**

Claim 1 (amended). Water-in-oil emulsions

- (a) with a content of water and optionally water-soluble substances totalling at least 75% by weight and with a content of lipids, emulsifiers and lipophilic constituents totalling at most 25%, [preferably at most 20%,] based in each case on the total weight of the preparations,
- (b) whose oil phase is [chosen from] **is selected from** the group **consisting** of lipids [or] **and** lipid mixtures, where the total polarity of the lipid phase is between 20 and 30 mN/m,
- (c) comprising at least one interface-active substance, [chosen] **selected** from the group **consisting** of alkylmethicone copolyols. [and/or] alkylldimethicone copolyols, **and mixtures thereof**
- (d) optionally[, but particularly when the content of water and water-soluble (hydrophilic) constituents is between 75 and 80% by weight,] comprising one or more cationic polymers

Claim 2 (amended). Emulsions according to Claim 1, [characterized in that their content] **wherein the amount** of water and water-soluble substances is greater than 80% by weight, [in particular 85% by weight,] based [in each case] on the total weight of the [preparations] **emulsions**.

Claim 3 (amended). Emulsions according to Claim 1, [characterized in that] **wherein** the interface-active substances [chosen] are **selected from the group consisting of** cetyldimethicone copolyol, [and/or] laurylmethicone copolyol **and mixtures thereof**.

Claim 4 (amended). Emulsions according to Claim 1, [characterized in that] **wherein** the oil phase consists of at least 50% by weight[, preferably of more than 75% by weight,] of at least one substance [chosen] **selected** from the group **consisting of** (butyldecanol + hexyldecanol + hexyloctanol + butyloctanol), hexyldecanol, octyldodecanol, dicaprylyl ether, caprylic/capric triglycerides, octyl palmitate, isopropyl stearate, octyl octanoate, C₁₂₋₁₅-alkyl benzoates, cetylstearyl isonanoate, butylene glycol caprylate/caproate, tricaprylin, octyldodecyl myristate, di-C₁₂₋₁₃-alkyl tartrates, caprylic/capric diglycerol succinate, octyl isostearate, stearyl heptanoate, cocoyl caprylate/caproate, isopropyl palmitate, cetylstearyl octanoate, **and** octyl stearate.

Claim 5 (amended). Emulsions according to Claim 1, [characterized in that they comprise] **wherein cationic polymers are present in an amount of** from 0.01 to 10%[, preferably 0.25-1.25%, of cationic polymers].

Claim 6 (amended). Emulsions according to Claim 1, [characterized in that the] **wherein said** cationic polymer(s) [is/are chosen] **are selected** from the group consisting of cationic cellulose derivatives, cationic starch, copolymers of diallylammonium salts and acrylamides, quaternized [vinylpyrrolidone] **vinylpyrrolidone**/vinylimidazole polymers, condensation products of polyglycols and amines, quaternized collagen polypeptides, quaternized wheat polypeptides, polyethyleneimine, cationic silicone polymers, copolymers of adipic acid with

dimethylaminohydroxypropyldiethylenetriamine, copolymers of acrylic acid with dimethyldiallylammonium chloride, polyaminopolyamides, cationic chitin derivatives, cationic guar gum, quaternized ammonium salt polymers, and cationic biopolymers, [such as, for example, chitosan (average molecular weight from 50,000 to 2,000,000 g/mol [determined by means of gel permeation chromatography] and a degree of deacylation of from 10 to 99% [determined by means of $^1\text{H-NMR}$]].